TOPIC/EQUIPMENT: PICKUP, CARRY, RAISE, CLIMB AND LOWER AN ALUMINUM SOLID BEAM 24' EXTENSION LADDER – ONE PERSON METHOD

CATEGORY: Performance Examination

POINTS POSSIBLE: 100

TIME ALLOWED: 4 minutes, 15 seconds

BEHAVIORAL OBJECTIVE:

Condition: A 24 foot aluminum solid beam extension ladder, lying flat on a level surface with fly section up, structural protective clothing and one assistant

Behavior: The student will demonstrate safe procedures of working on and handling an extension ladder

Standard: Following steps and procedures in proper sequence, according to the attached score sheet, with a minimum 70% accuracy, within four minutes and fifteen seconds

MATERIALS NEEDED:

- One (1) - Set Structure Safety Clothing per student
- One (1) - 24' Extension Ladder
- One (1) - Assistant
- One (1) - Stop watch
- One (1) - Score Sheet per student
- One (1) - Manipulative Performance Test Cover Page

PROCEDURES: The examination and time will start when the student either verbally or by conduct performs any step of the performance examination. The examination will end when the student either verbally or by conduct indicates the examination has been completed.

SCORING:

Points will be deducted for each step omitted, performed improperly, or performed out of sequence. Additional points will be deducted for any repeated step performed improperly. Steps designated by an asterisk (*) must be correctly performed or the student fails the entire examination. A score of zero (0) will be given, if during the examination, the ladder is dropped or handled in a manner jeopardizing the safety of the equipment or personnel, i.e., student grasps a rung on the ladder while the fly section is not tied off, or control of the ladder is lost.

SPECIAL NOTES:

1. Prior to entering the examination area the student will don full structural protective clothing.

2. Before the exam begins, students will be allowed to ask any clarifying questions and inspect the equipment.

3. The exam will begin and end at the same point as indicated by the evaluator. This point will be approximately 70 feet away from building test area. The course to and from the building will consist of two or three turns each way.

4. If any cracks (expansion joints) are present in the examination area, they cannot be used to ground and raise the ladder. If student does use any crack to assist in grounding and raising ladder, the exam will be stopped by the evaluator and student will start over from the very beginning.

5. Once the examination begins, the evaluator will not answer any questions or intercede in any way, unless a safety violation occurs that could injure personnel or damage equipment.

6 This exam is appropriate for use with an aluminum solid beam 24' two section Duo Safety extension ladder.

7. Wood ladders, fiberglass ladders, truss beam ladders, ladders of other manufacture, or NFPA non-compliant ladders, and ladder of lengths other than 24' are not covered by this exam.

DATE ____/____/____ TEST #_____ RETEST #_____ UNIT # _____

STUDENT'S NAME _____

EVALUATOR'S NAME_____

STEPS AND PROCEDURES	**POINTS**
If at any time the student loses control of the ladder, grasps a rung on the ladder while the fly section is not tied off, or incorrectly performs a step designated with an "*" (asterisk), a final score of zero (0) will be given. The evaluator may terminate the examination for safety reasons if, in his/her judgment, continuation of the examination would jeopardize the safety of personnel or equipment.	
Time Start	
1. Assume a low crouch position on either side of the ladder, at the balance point, facing the tip of the ladder	3
2. Grasp the near ladder beam at the balance point with an overhand grip	2
3. Rotate the ladder to a position perpendicular to the ground by tilting it up onto the farthest beam, lifting with legs not back	3
4. Move to the tip of the ladder while steadying the ladder by sliding a hand down the top beam	2
5. At the tip of the fly section of the ladder, simultaneously grasp the ladder by the top beam, lift the ladder from the ground to at least chest height and pivot the body into the ladder until in a position facing the butt of the ladder	5
6. By placing the working hand palm up directly above the shoulder slide the hand down the bottom beam until the balance point is reached. The free hand must support the top beam	4
7. Upon reaching the balance point dip or bend the knees slightly and leverage the butt of the ladder off the ground into a high shoulder carry position	4

8.	Carry the ladder to the designated point with the butt end tilted down announcing "ladder coming through" and "ladder coming around" as necessary	*
9.	Upon reaching building raise ladder by lowering the butt end of the ladder to the ground and simultaneously pushing the lower beam upward until the ladder is in a vertical position with both butt spurs contacting the ground and the fly section toward the building	5
10.	With both hands on the beams of the ladder stabilize the ladder by placing the instep, calf and knee of one leg against the beam of the ladder and the other leg one step back	*
11.	Release the ladder beams, grasp the halyard with both hands in a thumbs down position and place both forearms against the beams	5
12.	Announce "fingers and toes" loudly	5
13.	Using a hand over hand method raise the fly section of the ladder with the halyard to the proper height. In the event the student needs to grasp the ladder to maintain control, the beams, not the rungs, must be grasped	5
14.	Lower the fly section until the pawls lock on a rung	3
15.	Visually confirm that the pawls are locked then announce "pawls locked" loudly	*
16.	Facing the ladder and the building place the ball of either foot on the bottom rung of the ladder and both hands at chest height on the beams then slowly lower the extended ladder into the building	5
17.	Form a loop with the excess halyard, by wrapping the excess over one rung or two adjacent rungs and then tie off with a clove hitch and finish with a half hitch	*

18.	Check the climbing angle by facing the ladder and building, with toes touching the butt of the ladder extend arms outward parallel to the ground. If palms do not reach the rungs or project through the ladder, adjust the ladder by grasping different rungs from the front and the back of the ladder and lifting with the legs, place the ladder at the proper climbing angle	*
19.	Request an assistant to heel the ladder	*
20.	Climb the ladder cautiously and smoothly using the alternate rung foot and hand technique	*
21.	Check to ensure that pawls are engaged prior to climbing the fly section	3
22.	Halt climb at the roof line and lock in using the leg lock method with either foot projected through the ladder between the rungs and wrapped around the beam	*
23.	Work off the ladder to the side opposite the leg lock by extending both hands in that direction and announcing "working left/right"	3
24.	Descend the ladder cautiously and smoothly using alternate rung foot and hand technique	3
25.	Dismiss the assistant heeling the ladder	2
26.	Untie the clove hitch and half hitch, then facing the ladder and the building, place the ball of either foot on the bottom rung of the ladder and with both hands at chest height on the beams, slowly take (leverage) the ladder away from the building to a vertical position. (Prior to accomplishing this step it may be necessary to reposition the ladder by grasping different rungs from the front and the back of the ladder and lifting with the legs, place the ladder nearer the building to increase leverage for taking the ladder out.)	4
27.	With both hands on the beams of the ladder, stabilize the ladder by placing the instep, calf and knee of one leg against the beam of the	*

	ladder and place the other leg one step back	
28.	Release the ladder beams, grasp the halyard with both hands in a thumbs down position and place both forearms against the beams	3
29.	Announce "fingers and toes" loudly	3
30.	Using a hand over hand method, raise the fly section slightly to unlock the pawls then lower the fly section with the halyard. In the event the student grasps the ladder, to maintain control, the beams not the rungs must be grasped	4
31.	Lower the fly section until the pawls lock on the second rung	3
32.	Visually confirm that the pawls are locked then announce "pawls locked" loudly. Shift hands from halyard to beams	3
33.	Visually check the area where the tip of the ladder is to be lowered and loudly announce "clear"	*
34.	Positioned at the side of the ladder, facing the corner of the beam with one hand on each beam, tilt ladder toward the body while walking backwards. Slide the palm of the hand on the lower beam to the balance point	4
35.	Dipping at the knees slightly, leverage the butt of the ladder off the ground into a high shoulder carry position while supporting the ladder with the working hand positioned between the shoulder and the lower beam of the ladder, palm up. Use free hand to support top beam of the ladder	3
36.	Carry the ladder to the designated point with the butt end tilted down announcing "ladder coming through" and "ladder coming around" as necessary	*

37.	At designated point lower the butt of the ladder until the butt spur of the bottom beam rests on the ground, then walk backwards until the tip of the ladder is reached	3
38.	At the tip of the ladder simultaneously grasp the top beam with an overhand grip, pivot the body inward toward the ladder and lower the ladder to the ground on the bottom beam by bending at the knees	4
39.	While rising turn around to face the ladder butt, bend at waist and slide the hand down the top beam to the balance point	2
40.	At the balance point grasp top beam with overhand grip simultaneously bend at the knees and lower top beam to the ground with fly section up	2

Time Stop

POINTS POSSIBLE: 100

POINTS DEDUCTED: _____

FINAL SCORE: _____

COMMENTS:

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